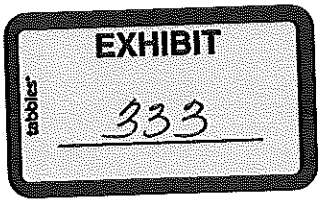

BUREAU OF WATER PROTECTION AND LAND REUSE
OFFICE OF THE BUREAU CHIEF

FEB 05 2010

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February 2, 2010

Paul E. Stacey
Department of Environmental Protection
Bureau of Water Protection and Land Reuse
Planning & Standards Division
79 Elm Street
Hartford, CT 06106-5127

Dear Mr. Stacey,

My name is Gordon Kauffman III, and I'm the research and development coordinator for Grigg Brothers specialty fertilizers and a member of the CAGCS. Grigg Brothers develops fertilizers for golf and sports turf. In addition, I remain actively involved in the educational process specific to legislation issues involving water and fertilizers use. The CAGCS and its members represent superintendents at the nearly 200 golf courses throughout the state, and I am writing this letter on their behalf. The current Proposed Stream Flow Standards and Regulations, while well intentioned, and certainly essential for a small number of water bodies in the state, do not thoroughly reflect the science associated with water and nutrient losses from turf systems.

Legislation passed without clear consideration and attention to the science could result in devastating and unintended consequences for our industry. This would include, but not be limited to, the negative fiscal impact that the proposed regulations will have on struggling golf courses throughout the state. Many of our member clubs have been pushed to the brink of bankruptcy during the recent economic downturn and the increase in cost associated with this proposal will potentially cause golf courses to fail. The existing registration and permit process has cost our member clubs between $50,000 and $650,000 each in consulting, legal, infrastructure and permit fees. For many golf clubs in the state, the proposed regulation will create an additional financial burden that they will not be able to sustain. If golf courses close, the land will likely be utilized by housing developments and industrial use which would likely have a greater negative impact on water quality (septic systems) and usage, in addition to stressing municipal services throughout the state. Golf courses serve as open green space providing natural habitat to wildlife, helping to absorb and filter rain water, improve community aesthetics, and improve the physical and mental health of some 350,000 golfers state-wide. In addition they provide nearly 10,000 jobs and $400 million in net revenue to the state.

Collectively, golf course superintendents pride themselves as stewards of the environment, often policing themselves and their colleagues when it comes to water usage. This is due to the fact that their delivery systems are expensive to operate and maintain, and wet conditions promote decline in turf quality and playability. For these reasons, they take great care in the amount of water used. Too little is certainly better than too much from an agronomic standpoint and they understand this. It is in every golf course's best interest to conserve water and they continue to work closely with the DEP to develop the "Best Management Practices for Golf Course Water

Use." When effectively irrigated, healthy turf grass provides numerous environmental benefits including:

-Production of oxygen (carbon dioxide exchange) which cools the atmosphere;
-Prevents soil erosion;
-Filters natural and synthetic contaminants from rainfall; and
-Recharges critical groundwater supplies.

Golf courses actually and other properly maintained turf areas serve as "infiltrative buffers" for rainwater and residential/industrial runoff. I've studied the fate of water, nutrients, and soil applied to turfgrasses and found that vigorous turf systems mitigate water (with associated and soluble pesticides, nutrients and other solutes) and soil movement to non target areas, and have published a recent paper in the Agronomy Journal on the topic (Kauffman et al., 2007). Proper irrigation practices call for deep, infrequent irrigation cycles. This is accomplished by bringing the soil profile to "field capacity", and then allowing it to dry down. As this cycle is repeated, turf grass roots dig deeper to "mine" the soil for water and nutrients. Over time, the deeper roots make for stronger plants which require less fertilizer, pesticides, and water. By putting superficial limits on daily watering allotments, we are promoting light, frequent irrigation which over time will promote poor root development and weaker plants that require more fertilizer, chemicals and water to sustain.

Additionally, as was reported at the DEP's December 21st Informational Hearing, a superintendent's irrigation practices account for less than 1-percent by volume, of the registered and/or permitted water diversion in the state. It has also been reported that less that .4-percent of the State's water bodies are considered "at risk". Based on these facts, CAGCS would respectfully ask that DEP reconsider the process. We feel it would be more sensible to classify first and complete a comprehensive economic impact study in partnership with the small business stakeholders. The proposed regulations should be narrowed to focus on the .4-percent of water bodies that are "at risk" rather than attempt to apply a broad standard to bodies of water that aren't in any danger.

CAGCS would like to specifically ask that DEP exempt golf courses from this proposed regulation, pursuant to the updating, clarification, and implementation of the "Best Management Practices for Golf Course Water Use" by all golf courses in the state. We feel that through new technologies and best management practices, the majority of golf courses are already achieving the results the department is seeking in this regulation. Following the conclusion of the comment period, CAGCS would appreciate the opportunity to meet with the department to discuss the details of an exemption.

Thank you for the opportunity to comment. We look forward to continuing our conversation on this important matter.

Sincerely,

Gordon Kauffman III

CC: John Garcia

Reference: Kauffman, G.L. and T.L. Watschke. 2007. Phosphorus and Sediment in Runoff after Core Cultivation of Creeping Bentgrass and Perennial Ryegrass Turfs. Agron. J. 99:141-147.